Cyberoam NG series of Unified Threat Management appliances are the Next-Generation network security appliances that include UTM security features and performance required for future networks. The NG series for SOHO offer “the fastest UTMs made for SMBs” to small offices. The best-in-class hardware along with software to match, enables the NG series to offer unmatched throughput speeds, compared to any other UTM appliance in this market segment. This assures support for future IT trends in organizations like high-speed Internet and rising number of devices in organizations – offering future-ready security for small office networks.

With Cyberoam NG series, businesses get assured Security, Connectivity and Productivity. The Layer 8 Technology treats User-Identity as the 8th Layer in the protocol stack. It attaches User-Identity to security, which adds speed to an organization’s security by offering instant visibility into the source of attacks by username rather than only IP address. Cyberoam’s Extensible Security Architecture (ESA) supports feature enhancements that can be developed rapidly and deployed with minimum efforts, offering future-ready security to organizations.

Cyberoam UTM features assure Security, Connectivity, Productivity.

**Security**
- Network Security
  - Firewall
  - Intrusion Prevention System
  - Web Application Firewall
- Content Security
  - Anti-Virus/Anti-Spyware
  - Anti-Spam (Inbound/Outbound)
  - HTTPS/SSL Content Security
- Administrative Security
  - Next-Gen UI
  - iView- Logging & Reporting

**Connectivity**
- Business Continuity
  - Multiple Link Management
  - High Availability
- Network Availability
  - VPN
  - 3G/4G/WiMAX Connectivity
- Future-ready Connectivity
  - “IPv6 Ready” Gold Logo

**Productivity**
- Employee Productivity
  - Content Filtering
  - Instant Messaging Archiving & Controls
- IT Resource Optimization
  - Bandwidth Management
  - Traffic Discovery
  - Application Visibility & Control
- Administrator Productivity
  - Next-Gen UI
## Interfaces
- Copper GE Ports: 4
- Configurable Internal/DMZ/WAN Ports: Yes
- Console Ports (RJ45): 2
- USB Ports: 2

## System Performance*
- Firewall Throughput (UDP) (Mbps): 1,800
- Firewall Throughput (TCP) (Mbps): 1,200
- Next generation session/s: 6,000
- Concurrent sessions: 50,000
- IPSec VPN Throughput (Mbps): 210
- No. of IPSec Tunnels: 600
- SSL VPN Throughput (Mbps): 75
- WAP Protected Throughput (Mbps): 100
- Anti-Virus Throughput (Mbps): 350
- IPS Throughput (Mbps): 240
- UTM Throughput (Mbps): 125

## Antivirus, IPS and UTM performance is measured based on HTTP traffic as per RFC 3511 guidelines. Actual performance may vary depending on the real network traffic environments.

- Scan and deliver by file size
- Schedule-based access control
- Spam Notification through Digest
- IP address Black list/White list
- Protocols supported: HTTP, HTTPS
- Web Categories: Default (89+), External URL Database, Subject line tagging
- On-Cloud Web Categorization

## Web Filtering
- Layer 7 (Applications) & Layer 8 (User - Identity) Control and Visibility
- In-built Application Category Database
- Control over 2,000+ Applications classified in 21 Categories
- Filter based selection: Category, Risk Level, Characteristics and Technology
- Schedule-based access control
- Visibility and Controls for HTTPS based Micro-Apps like Facebook chat, YouTube video upload
- Securing SCADA Networks
  - SCADA/ICS Signature-based Filtering for Protocols Modbus, DNP3, IEC, IEC 61850, Secure DNP3, Longtalk
  - Control various Commands and Functions

## Web Application Firewall
- Positive Protection model
- Unique "Intuitive Website Flow Detection technology"
- Protection against SQL Injections, Cross-site Scripting (XSS), Session Hijacking, URL Tampering, Cookie Poisoning etc.
- Support for HTTP 0.9/1.0/1.1
- Back-end servers supported: 5 to 300 servers

## Virtual Private Network
- IPSec, L2TP, PPTP
- Encryption - 3DES, DES, AES, Twofish, Blowfish, Serpent
- Hash Algorithms - MDS, SHA-1
- Authentication: Pre-shared key, Digital certificates
- IP/IX S/P NAT Traversal
- Dead peer detection and PFS support
- Diffie Hellman Groups - 1, 2, 5, 14, 15, 16
- External Certificate Authority support
- Export Router Warrior connection configuration
- Domain name support for tunnel end points
- VPN connection redundancy
- Overlapping Network support
- Hub & Spoke VPN support
- Threat Free Tunneling (TFT) Technology

## SSL VPN
- TCP & UDP Tunneling
- Authentication - Active Directory, LDAP, RADIUS, Cyberoam (Local)
- Multi-layered Client Authentication - Certificate, Username/Password
- User & Group policy enforcement
- Network access - Split and Full tunneling
- Browser-based (Portal) Access - Clientless access
- Lightweight SSL Tunneling Client
- Granular access control to all the enterprise network resources
- Administrative controls - Session timeout, Dead Peer Detection, Portal customization
- TCP based Application Access - HTTP, HTTPS, RDP, TELNET, SSH

## Wireless WAN
- USB port 3G/4G and WiMAX Support
- Primary WAN link
- WAN Backup link

## Bandwidth Management
- Application, Web Category and Identity based Bandwidth Management
- Guaranteed & Burstable bandwidth policy
- Application & User Identity based Traffic Discovery
- Data Transfer Report for multiple Gateways

## Networking
- WRR based Multilink Load Balancing
- Automated Failover/Failback
- Interface types: Alias, Multiport Bridge, LG (port trunking), VLAN, WAN, TAP
- DNS64 and DNS64 inbound load balancing
- IP Address Assignment - Static, PPPoE (with Schedule Management), L2TP, PPTP & DDNS, Client, Proxy ARP, Custom
- Multiple DHCP Servers support, DHCP relay
- Supports HTTP Proxy, Parent Proxy with FQDN
- Dynamic Routing: RIP v1/v2, OSPF, BGP, PIM-SIM, Multicast Forwarding
- Discover mode for PoC Deployments
- IPv6 Support:
  - Dual Stack Architecture: Support for IPv4 and IPv6 Protocols
  - Management over IPv6
  - IPv6 Route: Static and Source
  - IPv6 tunneling (6in4, 6to4, 6rd, 4in6)
  - Alias and VLAN
  - DNSv6 and DHCPv6 Services
  - Firewall security over IPv6 traffic
  - High Availability for IPv6 networks

## Application Layering
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**For details, refer Cyberoam’s Technical Alliance Partner list on Cyberoam website.**

### High Availability
- Active-Active
- Active-Passive with state synchronization
- Stateless Failover with LAG Support

### Administration & System Management
- Web-based configuration wizard
- Role-based Access control
- Support of API
- Firmware Upgrades via Web UI
- Web 2.0 compliant UI (HTTPS)
- UI Color Stylers
- Command Line Interface (Serial, SSH, Telnet)
- SNMP (v1, v2, v3)
- Multi-lingual: English, Chinese, Hindi, French, Japanese
- Cyberoam Central Console (Optional)

### User Authentication
- Internal database
  - AD Integration and OU-based Security Policies
  - Automatic Windows/RADIUS Single Sign On
  - External LDAP/LDAPS/RADIUS database Integration
  - Thin Client support
  - 2-factor authentication: 3rd party support**
  - SMS (Text-based) Authentication
  - Layer 8 Identity over IPv6
  - Secure Authentication – AD, LDAP, Radius
  - Userless Users
  - Authentication using Captive Portal

### Logging/Monitoring
- Real-time and historical Monitoring
- Log Viewer - IPS, Web filter, WAF, Anti-Virus, Anti-Spam, Authentication, System and Admin Events
- Forensic Analysis with quick identification of network attacks and other traffic anomalies
- System support
- 4-eye Authentication

### On-Application Cyberoam-View Reporting
- Integrated Web-based Reporting tool
- 1-200+ multi-rdbms solutions
- Compliance reports - HIPAA, GLBA, SOX, PCI, FISMA
- Zone based application reports
- Historical and Real-time reports
- Default Dashboards: Traffic and Security
- Username, Host, Email ID specific Monitoring Dashboard
- Reports – Application, Internal & Web Usage, Mail Usage, Attacks, Spam, Virus, Search Engine, User Threat Quotient (UTQ) for high risk users and more
- Client Types Report including BYOD Client Types
- Multi-format reports - tabular, graphical
- Export reports in - PDF, Excel, HTML
- Email notification of reports
- Report customization – (Custom view and custom logo)
- Supports 3rd party PSA Solution – ConnectWise

### IPSec VPN Client***
- Inter-operability with major IPSec VPN Gateways
- Import Connection configuration

### Certification
- Common Criteria – EAL4+
- ICSA Firewall – Corporate
- Checkmark Certification
- VPNC – Basic and AES interoperability
- IPv6 Ready Gold Logo
- Global Support Excellence – ITIL compliance (ISO 20000)

### Hardware Specifications
- Memory: 2GB
- Compact Flash: 2GB
- HDD: 250GB or higher

### Compliance
- CE
- FCC

### Dimensions
- H x W x D (inches): 17.6 x 9.1 x 4.4
- H x W x D (centimeters): 44.3 x 15.3 x 23.2
- Weight: 2.3 kg, 5.07 lbs

### Power
- Input Voltage: 100-240 VAC
- Consumption: 33.5W
- Total Heat Dissipation (BTU): 114

### Environmental
- Operating Temperature: 0 to 40 °C
- Storage Temperature: -25 to 75 °C
- Relative Humidity (Non condensing): 10 to 90%